## In the Claims:

 (CURRENTLY AMENDED) <u>A device for homeland intelligence systems</u> technology to enable detection of and protection against weapons of mass <u>destruction</u>, comprising:

at least a sensor means embedded in at least a silicon substrate and etched in at least a micro-fibered material, worn on a person, in communication with disposed in an outfit to enable at least an effective detection platform;

said detection platform comprising an interactive monitoring means operatively configured to relay to with at least a communication means, wherein said detection platform further enables pre-use and/or post-use detection of deadly weapons in a monitored environment or battlegound assignment;

a means configured to empower said detection platform; said communication means comprising means for analyzing detection signals;

said communication means communicatively configured with said

detection platform for enabling detection and interactive communication;

including at least audio communication, biological, chemical, nuclear,
radiological agents and explosives;

said communication means further enabling a wireless communication network with a transmitter means and a receiving means, and operatively configured to enable communicating said detection of deadly weapons to at-least a control center such as a homeland security agency.

said detection platform further includes pre-use and/or post-use of said deadly weapons, comprising:

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- 46. (NEW) The device of claim 1, wherein said sensor means comprises a plurality of sensors, each said plurality of sensors configured to enable at least a specific detection of deadly weapons.
- 47. (NEW) The device of claim 46, wherein said sensor means comprises nanosensors, bringing signals that contain at least chemical targets into contact with said detection platform thereby allowing at least a chemical target to be bound to

- a discrete region of said sensor means.
- 48. (NEW) The device of claim 47, wherein said nano-sensors further include at least MEMS and at least an RFID code-able chip.
- 49. (NEW) The device of claim 48, wherein said sensor means provide an optical radiation corresponding to a first wavelength emitted from at least one of the discrete regions of said nano-sensors.
- 50. (NEW) The device of claim 49, wherein said discrete regions of said nano-sensors have membranes passing through the sensor means responsible for analyzing data transmission.
- 51. (NEW) The device of claim 50, wherein said discrete regions of said nano-sensors further comprise a first cleansing of the affinity column for extracting at least said analyte of a dissolved and/or suspended material other than the bound analyte.
- 52. (NEW) The device of claim 51, wherein said discrete regions of said nano-sensors further comprise a second releasing of the analyte from the affinity column for providing the analyte with a measurable fluorescence when the analyte does not have a measurable natural fluorescence.
- 53. (NEW) The device of claim 52, wherein said sensor means enables detection of a human heartbeat and respiratory system within a monitoring environment and/or battlefield assignment.
- 54. (NEW) The device of claim 53, wherein said sensor means determines whether a person is carrying a concealed object by conducting a test in which a first characteristic of a first dielectric constant associated with the person is determined, and a second characteristic of a second dielectric constant associated with the weapon of mass destruction is determined.
- 55. (NEW) The device of claim 54, wherein said sensor means further includes method for transforming the effects of electrochemical interaction with an analyte electrode into useful signal communication to said control center.
- 56. (NEW) The device of claim 55, wherein said analyte of said sensor means comprises at least a metal oxide and/or semiconductor gas sensor.
- 57. (NEW) The device of claim 56, wherein said sensor means further includes at least a transmitter for transmitting detection signals to enable interactive wireless

- communication with said control center.
- 58. (NEW) The device of claim 1, wherein said detection platform is configured to detect a concealed weapon, including weapons in a gaseous phase, a liquid phase, a solid phase, or an applied explosive phase, and is configured to produce a real-time alert when a weapon of mass destruction is detected.
- 59. (NEW) The device of claim 58, wherein said detection platform comprises a temperature detector, a contextual object detector, and at least a speech detector.
- 60. (NEW) The device of claim 59, wherein said detection platform is further configured to detect selected sounds, un-parallel wave motion, biological agents, chemical agents, nuclear agents, radiological agents, and environmental pressure change.
- 61. (NEW)The device of claim 60, wherein said detection platform further includes a mobile detection means configured to detect objects concealed on a person, a vehicle, or a vicinity.
- 62. (NEW) The device of claim 61, wherein said mobile detection means comprises a bistatic radar.
- 63. (NEW) The device of claim 62, further comprising a silicon substrate and a micro-fiber material on said sensor means for re-enforcing the effectiveness of said detection platform.
- 64. (NEW) The device of claim 63, wherein said silicon substrate and said microfiber material have excellent electrical properties.
- 65. (NEW) The device of claim 64, wherein said micro-fiber material has transistorized switches etched or fused within it to enable thermal adjustment to environmental change.
- 66. (NEW) The device of claim 1, wherein said communication means further includes a receiving means, including at least an RFID chip operatively configured with an FM receiver.
- 67. (NEW) The device of claim 66, wherein said communication means is configured with a memory and data storage means and communicatively connected to a control center.
- 68. (NEW) The device of claim 67, wherein said communication means further

- includes a means for transmitting and receiving analog and digital signals of varying frequencies.
- 69. (NEW) The device of claim 68, wherein said communication means is configured to convert signals from said sensor means and said detection platform into useful analytical signals and send them to a receiving means at said control center.
- 70. (NEW) The device of claim 69, communication means further comprises means for audiovisual communication and speaker means for outputting said human voice auditory message to personnel conducting security monitoring and /or battlefield engagement.
- 71. (NEW) The device of claim 1, wherein said communication means further comprises a first operational amplifier circuit configured with at least characteristic for converting the electrical current from the detection platform into a pulse.
- 72. (NEW) The device of claim 1, wherein said transmitter means is responsive for transmitting signals from communication means to said receiving means at said control center.
- 73. (NEW) The device of claim 1, wherein said receiving means is coupled to an antenna.
- 74. (NEW) The device of claim 73, wherein said antenna means is operatively configured with said detection platform and receiving means for receiving and outputting detection signals.
- 75. (NEW) The device of claim 74, wherein said antenna of said receiving means comprises an endfire waveguide antenna.
- 76. (NEW) The device of claim 75, wherein said receiving means further comprises means for transforming changes in optical phenomena due to at least an interaction of an analyte with a receptor part indicative of a sensed agent and/or explosives.
- 77. (NEW) A mobile homeland security system for monitoring terrorist activities and enemy line in a battlefield, comprising:
  - a portable wearable outfit enabling detection of and protection against

weapons of mass destruction, said portable wearable outfit comprising:

a processing means for receiving and processing analog and digital signals;

a pattern of recognition technique in communication with said processing means for determining pattern common to deployment of weapons of mass destruction;

a system of sensors in communication with processing means and pattern of recognition technique comprising means for detecting deployment of biological, chemical, explosive, or radioactive agents;

said system of sensors embedded in a silicon substrate and etched in a micro-fibered material located on said portable wearable outfit; and

a control center in communication with said processing means broadcasting emergency conditions to personnel monitoring assigned environment.

78. (NEW) A wearable protection and monitoring outfit and system for protecting a site and detecting weapons of mass destruction, comprising:

a sensor means embedded in a silicon substrate and etched in a microfiber material on the wearable protection and monitoring outfit for detecting deployment of biological, chemical, explosive or radioactive agents;

a detection means for analyzing signal communication from said sensor means, comprising:

an antenna coupled to said sensor means;

a transmitter in communication with said detection means enabling analyzed data transmission to a control means;

a conversion means within said control means for receiving said analyzed data transmission and analyzing said data into a wind pattern representation of a weapon of mass destruction frequency;

a communication device in communication with said detection means and said control means, comprising a ship disposed with wind tunnels configured with a turbino connected to a cell-means, wherein said communication device and cell means have energy upgraded through wind energy source means.

- 79. (New) A wearable protection and monitoring outfit and system for protecting a site and detecting weapons of mass destruction, comprising:
  - a sensing means;
  - at least a cell means;
  - a detection means:
- a communication means, in communication with said detection means and said at least a cell means, comprising at least a first chip means;
- a control means, in communication with said communication means; and

said communication means in communication with said detection means and said control means, comprising a ship disposed with at least a wind tunnel configured with at least a propeller operatively disposed with a turbine connected to at least a second chip means, wherein said at least a first chip means and said at least a second chip means communicatively enable energy upgrade through wind energy source means.

80. (New) A wearable protection and monitoring outfit of claim 79, wherein said at least a first chip means or wherein said at least a second chip means comprises at least a battery cell.